

609.151	Sloped Curb Type 1 - Circular	meter [Linear Foot]
609.19	Vertical Curb - Type 2	meter [Linear Foot]
609.20	Vertical Curb - Circular-Type 2	meter [Linear Foot]
609.23	Terminal Curb Type 1	Each
609.234	Terminal Curb Type 1 - 1.2 m [4 ft]	Each
609.237	Terminal Curb Type 1 - 2.1 [7 ft]	Each
609.2371	Terminal Curb Type 1 - 2.1 [7 ft] - Circular	Each
609.238	Terminal Curb Type 1 - 2.4 m [8 ft]	Each
609.244	Terminal Curb-Type 2 - 1.2 m [4 ft]	Each
609.247	Terminal Curb-Type 2 - 2.1 m [7 ft]	Each
609.26	Curb Transition Section B Type 1	Each
609.31	Curb Type 3	meter [Linear Foot]
609.34	Curb Type 5	meter [Linear Foot]
609.35	Curb-Type 5 - Circular	meter [Linear Foot]
609.38	Reset Curb Type 1	meter [Linear Foot]
609.39	Reset Curb Type 2	meter [Linear Foot]
609.40	Reset Curb Type 5	meter [Linear Foot]

SECTION 610 - STONE FILL, RIPRAP, STONE BLANKET, AND STONE DITCH PROTECTION

610.01 Description This work shall consist of excavating for and constructing a protective covering of stone. The types of protective covering of stone are designated as follows:

- a. Stone fill Machine placed embankment for fill slope
- b. Plain Riprap Machine placed stones on earth bedding
- c. Hand Laid Riprap Hand placed stones on earth bedding
- d. Stone Blanket Machine placed stones around piers and Abutments
- e. Heavy Riprap Machine placed stones on earth bedding
- f. Stone Ditch Protection Machine placed ditch protection of rock

610.02 Materials Materials shall meet the requirements of the following Sections of Division 700 - Materials:

Stone Fill

703.25

Plain and Hand Laid Riprap	703.26
Stone Blanket	703.27
Heavy Riprap	703.28
Stone Ditch Protection	703.29

610.031 General Suitable material removed when excavating for the placing of riprap, stone fill, stone blanket or stone ditch protection shall be used in the formation of embankments, subgrade and for backfilling as shown on the plans or as directed.

610.032 Placing Stones

a. Stone Fill and Stone Blanket Material for stone fill shall be deposited to provide a compact mass. The exposed slope shall be finished to the line and grade required without special handling or handwork. Material for stone blanket shall be deposited for protection around piers or abutments as shown on the plans. The stones shall be placed individually to form a reasonably compact mass. Spaces between the larger stones shall be filled with stone or spall of suitable size to leave an even surface conforming to the contour required.

b. Riprap Stones for riprap shall be placed upon a slope properly graded and compacted as called for. When required, the bottom of the riprap shall be placed in a trench at the toe of the slope. Plain riprap shall be placed full depth in one operation without special handwork and shall be placed approximately true to the required slope line and grade and be uniform in appearance. Hand laid riprap shall be random rubble, hand laid stones for the full depth placed in one operation to secure interlocking of all face stones and stones placed as backing. Larger stones shall be laid at the base of the slope. The stones shall be laid in close contact with the longer axis perpendicular to the plane of the slope to stagger joints. Except when required to be grouted the openings between the stones in all riprap shall be filled with spall, or rocks securely rammed into place.

Stones for heavy riprap shall be placed to the full depth in one operation without special handwork or machine work upon a properly graded and compacted slope. Above the low water elevation, stones shall be placed to form an approximate uniform surface, free from humps or depressions, with no excessively large stones projecting from the general surface. Loose stones or excessively large stones tending to extend above the average general surface shall be embedded, reoriented, or discarded. The

openings between stones on the face of heavy riprap shall be filled with spall or small rocks, securely rammed into place.

c. Stone Ditch Protection The ditch shall be excavated below the flow line to allow placement of the rock material to the specified depth. The stone ditch protection shall be placed, full depth, in one operation without special handwork, shall be approximately true to line and grade and shall be uniform in appearance.

610.05 Method of Measurement Stone fill, plain riprap, hand laid riprap, stone blanket, heavy riprap and stone ditch protection will be measured by the cubic meter [cubic yard], complete in place, except that when placed under water the quantity may be measured by truck load count with no reduction in volume.

610.06 Basis of Payment The accepted quantities of stone fill, plain riprap, hand laid riprap, stone blanket, heavy riprap and stone ditch protection and materials to fill the voids will be paid for at the contract unit price per cubic meter [cubic yard] complete in place.

Costs of all required excavation below the slope line for the placement of bedding, riprap, stone fill, stone blanket, stone ditch protection and for furnishing and placing the bedding material itself, will be considered incidental to the contract items and no separate payment will be made.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
610.07 Stone Fill	cubic meter [Cubic Yard]
610.08 Plain Riprap	cubic meter [Cubic Yard]
610.09 Hand Laid Riprap	cubic meter [Cubic Yard]
610.11 Stone Blanket	cubic meter [Cubic Yard]
610.16 Heavy Riprap	cubic meter [Cubic Yard]
610.18 Stone Ditch Protection	cubic meter [Cubic Yard]

SECTION 611 - SLAB FOR BACKSLOPE PROTECTION